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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,522

08/15/2003

Joseph P. Errico

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07/27/2007

SPINE MP

LERNER, DAVID, et al.

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WESTFIELD, NJ 07090

EXAMINER

PELLEGRINO, BRIAN E

ART UNIT

PAPER NUMBER

3738

MAIL DATE

DELIVERY MODE

07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/642,522

Applicant(s)

ERRICO ET AL.

Examiner

Brian E. Pellegrino

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner (5370697) in view of Hedman et al. (4759769). Fig. 5 shows a vertebral contact element **44** having a resting shape of a dome convexly extending from an orthopedic device **2**. Baumgartner discloses the contact element is a wire mesh (col. 3, lines 54-57) that is porous. The mesh is fully capable of having a convexity depth or footprint approximating and engaging the depth of a concave surface in vertebrae. However, Baumgartner fails to disclose the outer surface having a groove or an osteoconductive feature, such as a coating adjacent the contact element. Hedman et al. teach (Figs. 1,2) that a recess or groove **34,52** is used in the plate surfaces to secure or retain the resilient spring elements therein. Hedman also teaches that a coating for osteoconductive purposes is placed on the baseplate surfaces, col. 4, lines 4-9. It would have been obvious to one of ordinary skill in the art to utilize a groove to retain a compressible member therein as taught by Hedman et al. with the implant of Baumgartner such that it provides a more secure fastening of the mesh to the implant surface and eliminates any sliding or dislodgement of the mesh from the baseplates. In addition it would have been obvious to one of ordinary skill in the art to incorporate a

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coating as taught by Hedman with the vertebral implant of Baumgartner such that it provides a means to bond the surface with the vertebrae.

Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner '697 in view of Krebs et al. '685. Baumgartner is explained supra. It can also be seen (Fig. 1a) that the prosthesis is designed for some movement. Baumgartner also discloses materials that permit movement, col. 3, lines 19,20, 31. It can also be seen (Fig. 5) that the central region is remote from the outward surface of the baseplate. However, Baumgartner fails to disclose a coating disposed on an outer surface over the vertebral contact element. Krebs et al. teach that a coating or binder is used to secure a metal mesh to the surface of the implant, col. 2, lines 14,17,36-39. It would have been obvious to one of ordinary skill in the art to utilize a coating as the means to secure as taught by Krebs et al. for securing the mesh to the surface in the Baumgartner implant such that it prevents the mesh from detachment or movement from the outer surface under spinal loads or while inserting the implant.

Claims 21-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner '697 in view of Krebs et al. '685 and in view of Hedman et al. '769. Baumgartner, Krebs et al. and Hedman et al. are all explained above. However, Baumgartner fails to disclose the outer surface groove and a coating to secure the outer convex contact vertebral member. It would have been obvious to one of ordinary skill in the art to incorporate a groove in the surface of the plate as taught by Hedman with the spinal implant of Baumgartner having the outer mesh and to further use a coating to

secure the mesh as taught by Krebs such that it prevents the contact element from sliding along the surface of the baseplates or being dislodged from the surface.

Response to Arguments

Applicant's arguments filed 5/1/07 have been fully considered but they are not persuasive. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Regarding the combination of teachings of Baumgartner and Hedman, the knowledge taken or known from the prior art is that compressible members can be placed in grooves such that they do not move when forces are applied to them. It is common knowledge that as forces are applied to compressible members, i.e. a spring or mesh, that the forces can cause the mesh to deflect outward. Thus, one of ordinary skill in the art would look to ways of preventing the perimeter from moving. Hedman provides this teaching. The location of the groove in Hedman's device is irrelevant since the modification is to Baumgartner's implant that has the mesh on its outward facing surface. Therefore, one of ordinary skill in the art would then place a groove on the outer surface since the mesh is thereon and thus prevent the mesh from deflecting

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or sliding along the outer surface. Applicant's other arguments regarding combinations are moot since the amendment necessitated the new combination of references.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Pellegrino whose telephone number is 571-272-4756. The examiner can normally be reached on Monday-Friday from 8:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC 3700, AU 3738

BRIAN E. PELLEGRINO
PRIMARY EXAMINER

Brian E. Pellegrino